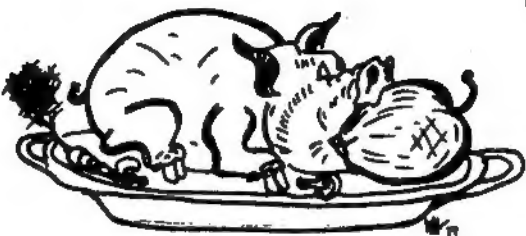


H.A.A.U.G.



HOUSTON AREA APPLE USERS GROUP

# THE APPLE BARREL

< SINGLE COPY PRICE \$1.50 >

VOLUME 4 NO. 1

JANUARY, 1981

President, Bruce Barber

Vice President, Mike Kramer

Editor, Ed Seeger

## <<< C O N T E N T S >>>

Page 2	Club Notes	
Page 4	File Cabinet Valid Feature	Lee Gilbreth
Page 6	Personal Computers	Wall Street Journal
Page 9	Business Group Meeting of 1/15/81	
Page 11	Letter to the Editor	re: MusicSystem
Page 12	Business Group Meeting of 12/4/81	
Page 13	Is Pascal for You?	Pat McGee
Page 15	Want and Don't Want Ads	
Page 16	Joystick Controller Hardware Project	Mike Kramer and Charles Yust
Page 17	International Apple Core News Bulletin	



&lt;&lt;&lt; CLUB NOTES &gt;&gt;&gt;

Houston Area Apple Users Group  
 APPLE BARREL  
 4331 Nenana Drive  
 Houston, TX 77035

The HOUSTON AREA APPLE USERS GROUP is an Apple II user club, not affiliated with Apple, Inc., or with any retail computer store. HAAUG is a member of the International Apple Core and supports its purposes and publications. General membership meetings are held on the second Thursday of each month in the rear chapel of Memorial Lutheran Church, 5800 Westheimer, right by the Jungman Branch Library and west of Chimney Rock. They start at 6:30 p.m. An additional meeting for access to the club software library, problem-solving, and various lectures is held the last Saturday of each month at the University of Texas School of Public Health (in the Medical Center), 6905 Bertner off Holcomb, across from Medical Center entrance #5. We meet on the main floor, first room on the left. Parking is adjacent to the building. These Saturday meetings begin at 2:00 p.m. Bring your Apple if you like!

-----\*-----

## OFFICERS / EXECUTIVE BOARD

President	Bruce Barber	469-5805
Vice President	Mike Kramer	358-6687
Treasurer	Ray Essig	497-7165
Secretary	Paul Maddock	783-1521
Software Lib.	Dennis Cornwell	774-0671
Hardcopy Lib.	Larry Baumann	498-3433
Hardware Chair	Charles Yust	783-5321
Business Uses	Rudge Allen	622-3979
Membership	Lee Gilbreth	342-2685
Newsletter Ed.	Ed Seeger	723-6919

## MEMBERSHIP INFORMATION

Dues are \$18.00 per 12-month period for regular memberships, \$6.00 for students through high school and where no adult member of the family is an Apple user. Please make checks payable to "Houston Area Apple Users Group," and mail to Lee E. Gilbreth, Membership Chair, 3609 Glenmeadow, Rosenberg, TX 77471. This includes a subscription to APPLE BARREL, which is published nine times a year. Newsletter exchanges with similar clubs are invited.

-----\*-----

## APPLE BARREL REPRINT POLICY

Unless otherwise indicated within the program or article, any ORIGINAL material published herein may be reprinted without permission by any non-profit Apple club, group or newsletter, PROVIDED proper credit is given to the APPLE BARREL and the article or program author.

-----\*-----

## SPECIAL INTEREST GROUPS

Members who share a common interest are encouraged to form Special Interest Groups to more fully explore their fields. Meetings may be arranged by common consent of the group and will ordinarily have one member who serves to coordinate or convene the meetings. If you would like to start a group around any given interest, please contact one of the club officers. If you would like to be in touch with others who share one of the following interests with you, please phone the coordinator.

Current groups are:

- 1) BUSINESS APPLICATIONS  
Coordinated by Rudge Allen,  
622-3979
- 2) PASCAL USERS  
Pat McGee coordinating,  
663-6806  
This Special Interest Group is  
to meet and discuss aspects of  
Apple's Pascal language and to  
exchange programs.
- 3) MODEM USERS  
Herb Crosby coordinating,  
497-1061
- 4) HAM RADIO OPERATORS  
Coordinated by Ed Seeger, WB5PTW  
723-6919  
Apple Net, 14.330 MHz, Sundays  
at 7:00 p.m. C.S.T. Worth moni-  
toring! WB7TRQ, Jim, net control
- 5) NEW MEMBERS  
Coordinated by Lee Gilbreth,  
342-2685
- 6) EDUCATIONAL APPLICATIONS  
Coordinated by Darrell Kachilla,  
498-0186
- 7) BEGINNERS' PROGRAMMING  
Coordinated by John C. Whiteman,  
974-7287 (home)  
This Special Interest Group is  
to meet and discuss Integer Basic  
and Applesoft.
- 8) FILE CABINET  
Coordinated by Lee Gilbreth,  
342-2685  
Purpose is to understand, expand  
and enhance the File Cabinet  
program.
- 9) SCIENTIFIC PROGRAMMING  
Coordinated by Martin Edelstein  
729-4199  
Includes Forth language group.  
Meets at 12:00 noon last Sat.  
of month, same location as Sat.  
meeting.

#### APPLE BULLETIN BOARD SYSTEM

The Houston Area Apple Users Group supports an ABBS evenings and weekends, 6:00 pm through 8:30 am, and all weekend long. Feel free to sign-on and place your want-ad, meeting notice, request for help, Aggie joke, etc. Any ASCII terminal, Apple computer or not, with suitable modem or coupler, will give you ABBS capability. Note that our ABBS now has download capability! Please sign off properly with 'G' command. Call

713/654-0759

SYSOP is Rudge Allen, 622-3979.



## File Cabinet Valid Feature

Last year in CALL A.P.P.L.E., Nelson Capes published a routine which goes into FILE CABINET that will restrict data file entries to certain preselected codes or words. This feature forces a standardization of entry record information to be carried in the system, especially useful when multiple users are inputting the file. Problems arising from alpha characters appearing in what should be a numerical field, use of improper abbreviations, and overly long string entries can be avoided.

At the time of initial header formation, the User is asked to give a series of valid codes which are to be used to test all future data entries for that field. For example, one might want to hold inputs for a header "Color of Eyes" to BROWN, BLACK, HAZEL, GREEN, and BLUE only. Perhaps under another header, only numerical figures are to be accepted. In this case DEC (standing for decimal) is typed in. But if a "-" (dash) is allowable, it too, can be added as a passing criteria. Finally, if there is to be no restriction, typing ANY will release a field to accept all types of entries. To end the code selection for a particular header, the User simply hits an extra <RETURN>.

The subroutines that do this are fairly straight forward:

```

*** INPUTING CODES ***
10 PRINT "HEADER FOR COLUMN NO. "NR": ";;INPUT R$(NR)
20 IF R$(NR) = "" THEN NR = NR - 1:GOTO XXX: REM SAVE HEADERFILE & VALIDFILE
30 FOR I = 1 TO NV - 1: REM NV IS LIMIT SET FOR NUMBER OF CODES PER HEADER
40 PRINT "ENTER VALID CODE FOR "R$(NR)": ";;INPUT V$(NR,I)
50 IF V$(NR,I) = "" THEN 70: REM END OF CODE SERIES FOR THIS HEADER
60 NEXT I
70 V$(NR,0) = STR$(I): REM NUMBER OF CODES SELECTED FOR THE HEADER
80 NR = NR + 1: GOTO 10

*** SAVE VALIDFILE ***
110 PRINT D$ "OPEN" DB$ " VALIDFILE"
120 PRINT D$ "WRITE" DB$ " VALIDFILE"
130 PRINT NR: REM NUMBER OF HEADERS WITH CODES
140 FOR J = 1 TO NR: PRINT V$(J,0): REM NUMBER OF CODES FOR A PARTICULAR HEADER
150 Z = VAL(V$(J,0)): FOR I = 1 TO Z: PRINT V$(J,I): REM A CODE FOR THIS HEADER
160 NEXT I: NEXT J
170 PRINT D$ "CLOSE"

*** READ VALIDFILE ***
200 PRINT D$ "OPEN" DB$ " VALIDFILE"
210 PRINT D$ "READ" DB$ " VALIDFILE"
220 INPUT NR: FOR J = 1 TO NR: INPUT NH
230 FOR I = 1 TO NH: INPUT V$(J,I)
240 NEXT I: NEXT J
250 PRINT D$ "CLOSE"

*** TESTING DATA ENTRIES ***
400 PRINT "YOU ARE ENTERING RECORD # " NR
410 FOR I = 1 TO NH
420 PRINT H$(I) ": ";;INPUT I$
430 GOSUB 450: REM BEGIN VALIDATION PROCESS
440 NEXT I

```

## \*\*\* TEST FOR PROPER CRITERIA \*\*\*

```

450 FOR J = 1 TO NV - 1
460 IF V$(I,J) = "ANY" THEN 520: REM ENTRY IS UNRESTRICTED
470 IF V$(I,J) = "DEC" THEN 600: REM TEST IF NUMERICAL
480 IF V$(I,J) = "" THEN 510: REM FAILED VALIDATION
490 IF I$ = V$(I,J) THEN 520: REM CODE FOUND, PASSED VALIDATION
500 NEXT J
510 VTAB PEEK(37): CALL -198: POP: GOTO 420: REM REJECTED ENTRY- REENTER DATA
520 RETURN

```

```

600 REM *** NUMERICAL VALIDATION ***
610 FOR K = 1 TO LEN (I$): Z = MID$(I$,K,1)
620 IF Z$ = "." OR Z$ > = "0" AND Z$ < = "9" THEN 640
630 GOTO 500: REM FAILED NUMERICAL VALIDATION
640 NEXT K: GOTO 520: REM PASSED NUMERICAL VALIDATION

```

As with other text files of FILE CABINET, VALIDFILE is sequential. The Total Number of Headers (NR) is given first, followed by a series of codes, each beginning with the number of codes (plus one) to be found within that header group. The VALIDFILE is graphocally depicted below along with an example input:

```

NR V$(1,0) V$(1,1) V$(1,2) ... V$(J,I) ... V$(NR,0) V$(NR,1) ... V$(NR,NV)
  4      2      ANY      ""      3      DEC      ""      5      BROWN BLACK HAZEL GREEN BLUE

```

All well and good for us to put this feature into our FILE CABINET, but what about those files we have established earlier? Well, Capes thought of this and gave us VALID MAINT as a remedy. Slightly modified, here is his solution:

```
JPOKE 1913,80
```

```
JLIST 100,10300
```

```

100 REM *** VALIN MAINT ***
110 REM * BY NELSON CAPE *
120 NV = 15: REM NUMBER OF VALID
    CODES PER HEADER
150 DIM V$(21,NV)
155 D$ = CHR$(13) + CHR$(4)
156 GOTO 300
158 ONERR GOTO 660
160 PRINT D$"OPEN "N$" HEADERFIL
    E"
165 PRINT D$"READ "N$" HEADERFIL
    E"
170 INPUT NR:NR = NR - 1
175 FOR I = 1 TO NR
180 INPUT H$(I)
190 NEXT I
200 PRINT D$"CLOSE"
210 RETURN
300 REM
400 TEXT : HOME : VTAB 10: PRINT
    TAB(15)"VALID MAINT": PRINT
    : PRINT TAB(5)"MAINTAINS '
    VALID FILES'": PRINT TAB(5
    )"FOR ";; INVERSE : PRINT "F
    ILE CABINET": NORMAL
500 PRINT : PRINT
600 PRINT "NAME OF DATA BASE": INPUT
    N$
650 GOSUB 158: GOTO 700
660 PRINT "NO HEADERFILE FOR "N$
    : END
670 TEXT : HOME : PRINT "NO VALI
    DFILE FOR "N$: GOTO 2400
700 ONERR GOTO 670
710 PRINT D$"OPEN "N$" VALIDFILE
    "
800 PRINT D$"READ "N$" VALIDFILE
    "
900 INPUT NR
1000 FOR I = 1 TO NR
1100 INPUT NH:V$(I,0) = STR$(N
    H)
1200 FOR J = 1 TO NH
1300 INPUT V$(I,J)
1400 NEXT J
1500 NEXT I
1600 PRINT D$
2300 TEXT : HOME
2400 PRINT "VALID HEADERS ARE:"
2500 FOR I = 1 TO NR: PRINT TAB(
    5)I TAB(10)H$(I): NEXT I

```

L LIST 2510,3800

```

2510 PRINT : PRINT "(TO EXIT THI
      S PROGRAM, TYPE '0')"; PRINT

2600 PRINT "UPDATE VALID CODES F
      OR WHICH HEADER # ?": INPUT
      H

2650 IF H = 0 THEN 3475
2700 HOME : PRINT "VALID CODES F
      OR HEADER "; INVERSE : PRINT
      H$(H); NORMAL : PRINT " ARE
      : "

2750 NH = VAL (V$(H,0))
2800 IF NH = 0 THEN INVERSE : PRINT
      "NONE!"; NORMAL : NH = 1: GOTO
      2900
2850 FOR I = 1 TO NH: PRINT TAB(
      5)I TAB( 10)V$(H,I); NEXT I
2900 POKE 34, PEEK (37): GOSUB 1
      0000
2910 ON VAL (F$) GOTO 3000,5000
      ,3475
3000 FOR I = NH TO NV - 1
3100 INPUT "VALID CODE ";V$(H,I)

3200 IF V$(H,I) = "" THEN 3400
3300 NEXT I
3400 V$(H,0) = STR$ (I)
3450 GOTO 2300
3475 PRINT D$"CLOSE "
3500 PRINT D$"OPEN "N$" VALIDFIL
      E"
3600 PRINT D$"WRITE "N$" VALIDFI
      LE"
3700 PRINT NR
3800 FOR I = 1 TO NR

3900 PRINT V$(I,0):NH = VAL (V$
      (I,0))
4000 FOR J = 1 TO NH
4100 PRINT V$(I,J)
4200 NEXT J
4300 NEXT I
4400 PRINT D$"CLOSE"
4500 END
5000 HOME : PRINT : PRINT "DELET
      E WHICH CODE(BY NUMBER) ?": INPUT
      I$:I = VAL (I$)
5050 IF I$ = "" THEN 6000
5100 IF I < 1 OR I > NH THEN VTAB
      PEEK (37): CALL - 198: GOTO
      5000
5200 FOR J = I TO NV - 2
5300 V$(H,J) = V$(H,J + 1)
5400 NEXT J
5500 V = VAL (V$(H,0)):V = V - 1
      :V$(H,0) = STR$ (V)
5600 GOTO 5000
6000 GOTO 2300
10000 REM MENU
10100 PRINT : PRINT "NOW :": PRINT
      TAB( 5)"1. ENTER MORE CODES
      ": PRINT TAB( 5)"2. DELETE
      A CODE"
10101 PRINT TAB( 5)"3. EXIT PRO
      GRAM NOW"
10200 INPUT F$
10201 IF VAL (F$) = 3 THEN 3475

10300 RETURN

```

J

Volume No.      of our HRAUG Software Library has a version of FILE CABINET modified with the Valid Feature (FC V). The diskette also contains a copy of VALID MAINT.

&lt; Lee Gilbreth &gt;



**Your Money Matters****Personal Computers Are Becoming More Useful To Many Investors for Managing of Portfolios**

By RICHARD A. SHAFER

Staff Reporter of THE WALL STREET JOURNAL

Personal computers are becoming much more useful to investors.

The small, relatively inexpensive machines have served as investment aids since their debut about four years ago. But until recently, individuals who tried to use the equipment for much more than routine bookkeeping usually had to learn to program, and often found themselves spending more time teaching the machine how to do a job than the job itself required. Now, however, recorded instructions are coming on the market that make it easier to have personal computers perform the tedious details of managing a portfolio, freeing the individual to concentrate on investment strategy.

"The microcomputer isn't magic — it won't guarantee a trading profit," says Charles Gallo of Square Deal Software, the Yonkers, N.Y., distributor of a market-charting program called Stock Technician. But he adds that with the new software the microcomputer is becoming a useful tool. "Within five years, I predict, no serious investor will be without a computer of his own."

The programs, sold on flexible magnetic disks that look like 45-rpm records, range in price from about \$50 to \$250, but a few sell for more than the computer systems on which they operate. Most of the programs run only on Apple Computer Inc. products because graphs of securities prices and other information can be displayed in greater detail on them. But a number of other programs are also designed for the popular Tandy Corp. TRS-80 computers.

**Price Range**

Most of the programs are intended for systems with retail prices of \$2,000 to \$4,000, including the computer, display screen, disk data-storage attachments and printer.

A few of the new programs help the active investor keep financial records. For example, Portfolio Master, from Investors Software, of San Francisco, can track any number of portfolios. Sales, purchases and current prices are put into the computer through the keyboard, and the program then displays them in various ways. The \$75 program also keeps track of all expiration dates and flashes a warning when an option or right is about to expire. When an investment is sold, Portfolio Master transfers it to a special sales table on the disk so that at the end of the year the machine can automatically calculate gains and losses for income-tax purposes. In most other portfolio programs, when a security is sold it disappears from the computer memory. Portfolio Master also keeps track of the recommendations of investment advisers, so that the performance of each adviser can be calculated at any time.

Most of the new programs, however, aid the investor in technical market analysis. Market technicians believe that statistical and other studies of historical trading volumes and prices provide some edge in trying to guess future prices. They see oracles in such things as ratios of new highs and lows, and the numbers of advancing issues compared with the numbers declining.

**Technical Analysis**

At least two programs are available to help those who try to select stocks following the investment theories of technical market analyst Joseph Granville. Stock Tracker, from H&H Trading Co. of Pleasant Hill, Calif., calculates buy and sell recommendations on the basis of trading dates, volumes and closing prices. It costs \$150 or \$350, depending on the version. A much more sophisticated embodiment of the same principles is the OBV Charting program from Stock Market Software of Ashland, Mass. A price history and a trading trend known as On-Balance Volume appear as a graph on the computer screen, and portions of the graph can be magnified or contracted according to the interest of the moment. OBV Charting will be available late next month at \$1,000 for the program and \$250 for all revisions during the first year.

"Before I got a computer, I simply didn't have the time to use Granville's method," says one of the authors of the program, Denys Wortman, a stockbroker at Moseley, Hallgarten, Estabrook & Weeden in Cambridge, Mass. "Now I have detailed, up-to-the-minute charts available at the touch of a button on almost anything likely to interest a customer. The time the computer saves me can be spent in more productive ways."

Most of the time is saved with the aid of a modem, a device that allows computers to fetch information about securities over the telephone lines from data bases kept on large computers. When he first developed OBV, Mr. Wortman had to put all the trading information into the computer each day by typing the data on its keyboard.

Now the program does the work itself. Each weekday evening when rates for computer services are at their lowest, Mr. Wortman's computer makes a local telephone call that connects it, through a network of other computers, to a data base in New Jersey. In about 20 minutes, and for a cost of \$3.50, his Apple computer retrieves complete trading information on 250 stocks, hangs up and stores the information on a disk, ready for his use. Mr. Wortman gets daily market information from Dow Jones & Co. Inc., publisher of this newspaper, and historical trading data from H&R Block's CompuServe subsidiary. But several other sources are available, including Interactive Data Corp. in Waltham, Mass., and Commodity Systems Inc., a Boca Raton, Fla., specialist in commodities information.

Soon, OBV charting will incorporate an electronic clock, allowing the computer to update its files automatically at selected times. Some commodities-trading programs already offer a clock feature, and clocks are under development for most market-charting programs, such as Square Deal's Stock Technician program. The charting program sells for \$250 in computer stores but can also be purchased, under the name Market Charter, through the mails from its author, RTR Software, of El Paso, Texas, for \$130.

For those whose informational needs are less immediate, Standard & Poor's Corp. offers the Stockpak program for TRS-80 computers. Stockpak is a \$50 library of 30 financial facts about each of 900 actively traded securities.

continued on next page . . .



group of commodities traders who joined forces in New Orleans about a year ago and whose numbers have grown from 30 to nearly 500 in that time. For a \$1,500 membership fee, the association, known as the Personal Computer Commodity Analysis Group, provides members with a five-disk package that lets the Apple II computer handle the day-to-day drudgery of watching commodities. And there can be plenty of drudgery, for few investors rely more heavily on technical analysis than those in commodities.

"I was spending 3 1/4 to four hours every night just doing my homework for the next day's trading," says group coordinator Timothy C. Slater, who has been trading commodities for 20 years. "Now my computer can do it more accurately in 20 minutes while I sleep."

Profits on the fees from new members go into a fund, which now totals \$100,000, to be spent in developing more programs that will be available free to those in the group.

#### Monitoring the Exchanges

For tape watchers, some programs permit personal computers to monitor transactions on the New York or the American Stock Exchange. The New York discount brokerage concern Max Ule & Co. sells one of the most comprehensive, Tickertec, at prices ranging from \$1,000 to \$2,000, depending on its capabilities. (The software is available free to traders who generate five times its price in commissions with Ule in a year.) Similar programs for watching the commodities market are sold by Commodities Communications Corp. in Anaheim, Calif.

Personal computers also can obtain news stories and other information about securities via telephone with the aid of a \$95 Dow Jones News Service program. Although this disk merely displays the information, anyone who wishes to save it on a disk can do so with Data Capture 4.0, priced at \$65, from Southeastern Software in New Orleans, or the Communicator, \$175, from Fidelity Information Services of Boston.

Fidelity Information is a new affiliate of Fidelity Management & Research Co., the mutual-fund and discount-brokerage concern. In addition to the Communicator, Fidelity recently began selling complete personal computer systems for the investor and the \$250 Trend-Spotter business-graphics and statistical-analysis program developed in conjunction with Software Resources of Cambridge.

"We see a substantial and growing market for such equipment and programs among our customers," says Kate Isen, director of marketing for Fidelity Information. "Many of those who use discount brokers are sophisticated investors who want the kind of analysis that only their own computer can provide."

#### Searching for Specifics

The program allows an investor to screen all the securities according to the criteria of his choice. With a few keystrokes, he could ask the computer, for example, to list the names of all companies whose stocks were selling below book value and whose earnings had risen by at least 15% in the last two years. Instead of using the telephone, however, Stockpak keeps up to date through the mails. For \$200 a year, subscribers are provided with monthly revisions of the information on all 900 companies.

The most comprehensive programs, and among the more expensive, are sold by a

## Apple Computer Issue Bobs to Steady Price While Tied-In Nautilus Fund Takes Dive

By TIM METZ  
And MITCHELL C. LYNCH

Staff Reporters of THE WALL STREET JOURNAL

NEW YORK—Apple Computer Inc. successfully completed a \$96.8 million initial public stock issue, Wall Street's biggest since the \$200 million Comsat issue 16 years ago.

Along the way Friday, the Apple issue managed to prove anew the ancient Wall Street theorem that bulls and bears make money, but pigs don't.

Rather than rising spectacularly in the over-the-counter trading that followed the \$22 a share public issue, Apple's stock price bounced into a tight \$28-to-\$29 bid band from which it rarely strayed for the rest of the day. It closed at \$28.75 bid, snug against the \$28.875 asking price.

That trading was disastrous, however, for holders of Eaton & Howard, Vance Sanders' Nautilus Fund, a closed-end investment company holding 360,000 unregistered Apple shares. Nautilus Fund, also traded over-the-counter, dove \$9 a share to close at \$36 bid.

The 20% plunge reflected investors' adjustment to deflated expectations for Apple's stock price.

#### Indirect Way to Play Apple

Many Nautilus holders had bought the fund's shares as an indirect way to play Apple stock, which they assumed would be so scarce that a huge run-up from the issue price seemed inevitable. Genentech Inc.'s share price had soared to \$89 just after its initial public issue at \$35 earlier this year.

Some had figured the sure way to get in on a sharp price rise would be Nautilus shares, which they expected would soar with Apple's. Speculators had bid up Nautilus's shares as high as \$53.50 and the stock sold as high as \$51 a share, or more than double the net asset value per share, as recently as 10 days ago.

"They took a big risk," said one professional Wall Street stock trader. "Unless Ap-

ple went right to \$50 or \$60 or more, they were going to get creamed—and they did."

With the overall stock market plunging more than 7% during the past two weeks, some wary Nautilus holders had begun selling their stock and it slipped to a \$45 closing bid last Thursday.

But what many of them failed to perceive were the vested interest and persuasive power of Morgan Stanley & Co., the manager underwriter, with San Francisco-based Hambrecht & Quist, of the Apple issue and the firm that kept the books for the underwriting syndicate.

Thomas A. Saunders III, Morgan's syndicate manager, had noted Genentech's initial public issue with more than passing interest. He'd seen the precipitous slide from the \$89 issue-day high to the stock's current price of \$39.50 bid on Friday. "We didn't want that," Mr. Saunders said Friday afternoon. Such a secondary market debacle would tarnish Morgan's reputation and jeopardize its role as a leading Wall Street underwriter.

So Morgan had been working feverishly in recent months to structure the offer so that Apple shares would hold a stable level in the hectic trading that followed the initial issue. Not long ago, some Apple people were guessing the company would sell only about one million shares to the public and many on Wall Street guessed the issue price would be around \$10 a share.

Instead, based on Morgan's advice, five million shares were sold on Friday—4.4 million new shares issued by the company and 600,000 existing shares sold by Apple principals in conjunction with the issue. The secondary netted \$12.4 million, after expenses, to the Apple shareholders, who weren't identified.

continued on next page . . .

**Nearly Everyone Gained**

As a result, nearly everyone involved in Friday's Apple issue—except Nautilus holders—wound up with solid gains.

Apple itself, a Cupertino, Calif., maker of personal computers, netted about \$91 million after expenses and fees and saw its share price at day's end resting at a level that is nearly 120 times its latest fiscal year earnings of 24 cents a share. Based on the 54.2 million Apple shares outstanding following the issue, Apple's total market value at Friday's close was \$1.56 billion. By contrast, Kennecott Corp., whose mineral deposits are valued in the tens of billions of dollars, ended Friday with a total market value of \$884 million.

Underwriters shared \$6 million of discounts and commissions and got high marks from Wall Street institutional investors for the stable post-issue trading.

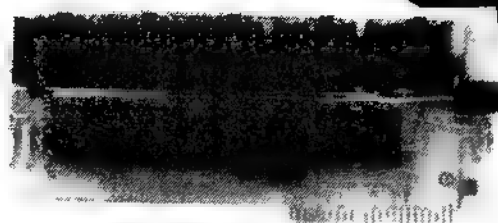
Meanwhile, investors who got the stock at the \$22 issue price currently have a 31% return on their investment, based on Friday's close.

There was even some consolation for Nautilus, which announced Friday it would value its unregistered Apple shares at 28% below the market price, or \$19.70 a share based on Friday's close. That compares with a \$4.125 per share value previously ascribed to the stock. The indicated increase in the fund's assets is more than \$5.6 million.







**BUSINESS GROUP MEETING**

The Special Interest Business Applications Group met at EBASCO Services Thursday, Jan 15, 1981, to review and discuss Data base systems. Demonstrated were THE DATA FACTORY from Microlab, CCA DATA MANAGEMENT SYSTEM from Personal Software and INFORMATION MASTER from High Technology. Since there appears to be so many good data base programs available on the market today, the Group plans to hold another session to cover them. The next meeting is tentatively planned for 7:00 PM, Thursday Feb 19, 1981, again at EBASCO Services.

**Now Available  
for the Apple II**



# 16 K Ram Expansion Board

-  expand your 48 K Apple to 64 K of programmable memory
-  allows you to run Apple's new Fortran package and other languages
-  plugs in slot 0
-  eliminates the need for an Applesoft™ or Integer Basic ROM card
-  switch selection of RAM or mother board ROM language
-  includes instruction manual

introductory offer **\$195<sup>00</sup>** Includes Shipping



Allow 4-6 Weeks  
Apple II and Applesoft  
are trademarks of  
Apple Computer, Inc.

A product of  
Andromeda  
Computer Systems.

P.O. Box 94, Hauppauge, N.Y. 11787

(516) 360-0988



## Mountain Hardware, Inc.

300 HARVEY WEST BOULEVARD, SANTA CRUZ, CA 95060 (408) 429-8600

November 17, 1980

Mr. Ed Seeger  
Houston Area Apple Users Group  
APPLE BARREL  
4331 Nenana Drive  
Houston, Texas 77035

Dear Ed,

We at Mountain Computer would like to respond to the recent review of our MusicSystem by Pat Mc Gee in the "APPLE BARREL". We would also like to request that this response be published in your next newsletter because we feel that the article did not present an accurate picture of the MusicSystem.

Given the complexity of this product and the potential for further enhancements we made the decision to release the product with completed hardware and partially completed software. It was clearly pointed out to every owner of the MusicSystem that the software would be an ongoing project and each enhancement diskette would be sent to the users at no charge.

The initial software that was released to our distributors was version 1.0. This software admittedly contained several bugs. Unfortunately, the bugs were not discovered until the day after the systems were shipped. We contacted all of our distributors in the U.S. to make them aware of this problem and to make sure that they did not ship any MusicSystems to their customers. We told them that version 1.1 would be following in a few days and that this version would be bug free. Unfortunately, many MusicSystems were shipped by the distributors with version 1.0.

We're not blaming our distributors for this goof. Obviously, the fault lies with us. But the important thing to remember is that we have corrected this problem and that the MusicSystem is the best musical synthesizer in the entire personal computer industry.

MusicSystem was never intended to be a toy. Just as a computer is more complex and useful than a calculator, so is our MusicSystem in relation to ALF. People who want a toy should buy ALF. People who want state-of-the-art capabilities should buy the MusicSystem.

It seems very unfair to review the MusicSystem based on early software. The differences between the old and new MusicSystems negate the HAAUG review. If someone had reviewed the early Apple computers with their marginal operating system and incomplete documentation I'm sure that it would not have been very positive. Consequently, we wanted to inform your readers of the transformation this product has gone through.

Some of the changes included in version 2.0 (4th version) are an Instrument Definition program and much faster PLAYER routine. These new enhancements along with the already improved documentation have brought our MusicSystem to the forefront of the music industry.

This product is no toy! It is a sophisticated, professional music synthesizer that will soon be heard in many upcoming albums and movies. And best of all, the MusicSystem is still growing. As they say, "You ain't seen nothin' yet!"

Sincerely,



Bill Schlosser  
Regional Sales Manager

BS/jd

#### BUSINESS GROUP MEETING

On Thursday, dec 4, 1980, the Business Group met to review programs designed to help investors in the Stock Market. Jolly Johnson demonstrated a sophisticated and complete analysis program, called COMPU TRAC, which he purchased from Personal Computer Technical Analysis Group based in New Orleans. This program package is able to call for and receive up to five days transactions of 20 commodity items traded during the week via a time share service which comes with the purchase. The program can then perform several analysis plots against data stored for a year or more.

To fully run the system, one has to have a security board, SuperChip, two disk drives, 48k RAM, graphics printer, misc cables etc, and a micro modem. Jolly noted that one good "hit" on the market will pay for all this equipment! Also mentioned programs for Stock Market application were RJR, ANA-1, and DATA CAPTURE. The first two have been reviewed in the Apple Orchard and the latter was noted in August CALL A.P.P.L.E. Next meeting of the Business Group will cover Data Management programs, probably in January, to be announced.

IS PASCAL FOR YOU  
or  
IS A LANGUAGE SYSTEM REALLY WORTH  
\$500

There have been quite a number of articles lately about Pascal. It has been hailed as the sign of a new renaissance in Personal Computing, the wave of the future, or as the same old tired thing in another package. Many articles have been filled with praise, a few with boos. The truth, as usual, is somewhere in the middle and depends on your point of view. To a novice BASIC programmer, Pascal can be a bewildering array of riches. To an ivory-towered computer researcher, Pascal really is just the same old thing in another package.

Since you are reading this, I am going to make some assumptions about you:

- 1) You have an Apple or are interested in getting one, and
- 2) You don't know whether you should buy a Language System; or you have one and want to be reassured that you didn't make a mistake.

Whether Pascal is for you depends on what you want to do with your computer.

If you want to run existing FORTRAN programs, you must have a Language System. If you use your Apple to run existing Apple programs, you probably don't need a Language System. If you want to write programs with broad appeal to Apple owners, you don't want a Language System. However, if you write programs for your own use or for limited distribution, Pascal is just what you need. Lets take these circumstances one at a time.

First, consider FORTRAN. There are many existing programs written in FORTRAN, some available for free, others for distribution cost. They include programs for seismic processing, electronic circuit design, simulation systems, etc. Most such programs are batch number crunchers. Many can be run on the Apple, using Apple FORTRAN, if (this can be a big if) you can get them onto an Apple disk. For a program available on Hollerith cards, that can be a real chore. However, it can be done and is usually much less effort than writing the program again. To do this, you must have a Language System.

If you want to run existing Apple programs, get whatever system is required to run those programs. There are very few Pascal programs available now, and most of them can be substantially duplicated by other available Apple programs. This situation probably will change in the coming years, but right now that's the way it is.

Writing Apple programs to sell can be a lucrative business. To have the greatest profit potential, you need to appeal to as large an audience as possible. You should not restrict your audience to only those with Language Systems. You don't need Pascal. I would estimate that not more than 5 percent of the



business users and 10 percent of the hobbyist users have Language Systems. The percentages in the local users group are even lower. I have heard rumors that someone has a way to take finished Pascal programs and run them on an Apple without a Language System. If this is true and you can use this technique, my advice changes. You are one of the people who need Pascal.

Now, let's consider people who write programs for their own use or who don't mind that the programs they write can't be run on most Apples. If you see yourself in this group, I think you also should use Pascal. Professional programmers should use the best tools available, as should any professional. Compared to BASIC, Pascal is an excellent tool.

There are two basic tradeoffs between BASIC and Pascal. BASIC is easier to learn, but writing long programs, and especially debugging and modifying them can be very time consuming. Learning to program in Pascal certainly takes longer. The payoff comes when you write a large program, and then go back and make some major modifications to it six months later.

For me, the time it takes to write and debug a large BASIC program seems to grow exponentially with the size of the program (i.e., a program twice as long takes four times as long to write.) Several other professional programmers that I have talked to have similar feelings. The time it takes me to write a large Pascal program seems to be much smaller in general, and to grow much more linearly (i.e., a program twice as long takes only twice as long to write).

I haven't said anything yet about the beauty, simplicity, and readability of a well written Pascal program. It is a joy to behold from an aesthetic point of view, and a godsend to a user who wishes to make modifications. There have been many articles written about these aspects of Pascal, and I won't bore you by repeating the message further. For many programmers, these are reasons enough to write in Pascal.

I think that anyone who spends more than 100 hours per year (2 hours a week) programming should invest in a Language System and invest the time to learn Pascal. The savings in time will handsomely repay you, and these savings will grow the more you program.

,c) Copyright 1980  
Pat McGee  
P. O. Box 20223  
Houston, Texas 77025

&lt;&lt;&lt; WANT AND DON'T WANT ADS &gt;&gt;&gt;

BACK ISSUES OF APPLE BARREL are for sale in limited quantities! Many of you have inquired about their availability. The following back issues can be bought by mail for \$1.00 each, postpaid:

vol. 2 no. 5	August, '79
vol. 2 no. 6	Sept/Oct, '79
vol. 3 no. 1	January, '80
vol. 3 no. 2	February, '80
vol. 3 no. 3	Mar/Apr, '80
vol. 3 no. 6	August, '80
vol. 3 no. 7	Sept/Oct, '80
vol. 3 no. 8	November, '80
(No Dec., 1980, issue published)	
vol. 4 no. 1	January, '81

This is a chance for newer members of HAAUG to catch up on programs, news, reviews, etc. Sorry, but there will be NO reprints when these are gone. Make checks payable to H.A.A.U.G. and send to Apple Barrel; Ed Seeger, Editor; 4331 Nenana Drive; Houston, TX; 77035. Please allow 2 weeks for delivery.

SUPER.TEXT WORD PROCESSOR, version 2, by Muse for sale at \$85 in mint condition. This is one of the "big two" (EasyWriter is the other) implemented on the Apple in the \$100 range. Worth \$100 if you wish to trade it in for their "Professional" system at \$150. Has math mode (!), built-in back-up routine for files, and displays upper & lower case ON SCREEN with Paymar chip. Ed Seeger evenings at 723-6919.

MEMORY SALE: Finest grade Mostek 4116 chips. 5 sets \$49.95/set. Call Tom Broderick at 463-0642.

8, 4K MEMORY CHIPS (original issue), \$35 or best offer. Randy Reeves, 376-1721 anytime.

SILENTYPE PRINTER FOR SALE. Excellent condition. Used less than one roll of paper. Program to print HIRES graphics at double normal size. Call Fred Gerlach, 981-4409.

APPLE FORTRAN FOR SALE. regular \$200. For sale new, \$150. Call Robert Huntington, 342-5170.

GRAPHICS TABLET FOR SALE. Excellent condition, rarely used. Asking \$500. Call for details. Frank Jaubert, 868-0034.

APPLESOFT ROM CARD with Autostart chip installed. \$130. Ed Seeger, 723-6919.

PAYMAR LOWERCASE ADAPTER. \$45. Ed Seeger, 723-6919.

SPEECHLAB. \$125. Ed Seeger, 723-6919.

#### JOYSTICK CONTROLLER HARDWARE PROJECT

A joystick controller construction project is scheduled for the February 28 Saturday meeting. Estimated cost for the parts kit is \$20. Those interested should sign up and prepay at either the January 31 Saturday session or at the regular February 12 meeting. A total of 25 kits are being made available, with half signed up for as of January 13.

The controller will be wired for PDL(0), PDL(1), SW(0), and SW(1) and will be equipped with reversing switches to compensate for game programmers who do not know up from down. As you may have found out, it's not always easy to change a program to make the cursor move in the right direction. The joystick mechanism will be the self-centering variety. A controller test program will be available to verify proper operation.

In order to help assure that the project is completed in one session, the plan is to have volunteer slave labor predrill holes in the cases. That way you will only have to solder and bolt the controller together. Those who have pencil tip soldering irons, wire strippers, needle nose pliers, Dremel Mototools, extension cords, etc., are encouraged to bring them.

If you are interested, see either Mike Kramer or Charles Yust at either of the next two meetings. You must sign up and pay before the February Saturday session.

**INTERNATIONAL  
APPLE CORE**

TM

NEWS BULLETIN

This is our first issue of the IAC News Bulletin, the purpose of which is to provide to you on a monthly basis everything you ever wanted to know about the IAC but were afraid to ask.

Our format will change in response to feedback from you.

First off, we would like your suggestions for a name - IAC News Bulletin doesn't hack it.

So we hereby announce a name contest to begin as of the date of this issue. The contest entries must be postmarked no later than January 15, 1981. Entries will be judged and the winner selected by the IAC Board. We'll announce the winner and the prize in the February issue.

We have a constitution and bylaws! After considerable time and effort we are officially an organization. Sorry about not involving more of you - too difficult to pull off. However, according to powers provided to you, you may call for changes through special meetings and procedures. Check your copy for further details. Joe Budge, our Secretary, will mail them to you soon.

We also elected Jerry Vitt of Dallas to be Chairman of the Board.

Coming up - a call for nominations for Board Directors. Joe has sent out information describing the procedures. Be sure to advise your entire club membership. By all means, participate. IAC is here to serve you.

The annual IAC general meeting will be held in Chicago May 2 and 3. More information to follow as to time and place.

Now that we are "organized" we can get on to the business of defining more precisely what there is in it for you to be a member of IAC. Under consideration are such goodies as workshops for small businessmen (doctors, lawyers, bowling alleys, etc.), IAC ABBS through low cost WATS type lines, review of serious works and major hardware, ombudsman services, sponsorship of major projects, professional certification of members, and more. More on that later...

Reminder - renewal memberships will be due March 31, 1981. Your club will be billed. Also we prefer individual membership subscriptions to Apple Orchard. Please accept our apologies for the delay in getting Vol. 1, No. 2 of the Orchard to our subscribers. Yes, we goofed! However, from now on, subscribers are to get first preference, meaning three weeks earlier than either through the club or at the computer stores.

---

P. O. BOX 976, DALY CITY, CALIFORNIA 94017 USA

"APPLE" is the registered trademark of Apple Computer, Inc.

INTERNATIONAL APPLE CORE is licensed by Apple Computer, Inc. to use certain of the latter's trademarks.

A plea - Val Golding needs your input. It's your journal - remember, your magnum opus gets considerably greater visibility through publication in the Orchard. Try it!

Have you heard...?

...Craig Vaughan of Peripherals Unlimited has moved closer to the SOURCE. He now resides in Virginia. His new firm, Microsoftware Systems, has acquired the rights to all Peripherals Unlimited's software, and he can be reached at (703) 385-2944.

...Programma International has been bought out by Hayden Publications. Our Treasurer, Dave Gordon, is Vice President and General Manager for Programma.

...Videx has announced a new "keyboard enhancer" which provides upper and lower case display and entry with the standard 40-column APPLE keyboard.

...Novation has announced a new modem interface card for the APPLE.

...The "Smarterm" 80-column cards distributed by Apple are on their way to the dealers.

... Apple sent a note to all of their Level One Service Centers stating that old disk drives may need some modification to their analog cards to work properly with 16-sector DOS 3.3 and Pascal.

...The IAC Board has awarded a contract to DiLithium Press to print issues No. 4 through 7 of the Apple Orchard. Grawin Publications will do issue No. 3. We thank Grawin for the excellent job they have done on No. 2.

Your IAC disks and APnotes should be coming to you directly from the mail order firm responsible to Joe Budge. We're sure you will agree that the APnotes are great and we plan to improve the quality and documentation of our disks. Very shortly you will be getting standards notes.

Check the Help Wanted section of your next issue of the Orchard...

About the DOS 3.3 problem. Apple tells us that it was an unfortunate oversight that caused the problem - how many of you have 32K machines? As soon as they heard, they broke records patching the system and had it completed in one week! They do try hard.

Let us know of news, rumors, whatever you would like to share with your counterparts. Comments and feedback should be sent to Bernie Urban, Editor, at the IAC address. Comments may also be passed along to Chairman of the Board Jerry Vitt, who may be reached on his daytime modem (214) 369-0427. We encourage you to pass on this information to your membership through your newsletter or otherwise. Feel free to reproduce anything herein.

December 1, 1980

Houston Area Apple Users Group  
APPLE BARREL  
Ed Seeger, Editor  
4331 Nenana Drive  
Houston, Texas 77035



H.A.A.U.G

Postmasters:

Address Correction Requested:  
Forwarding and Return Postage Guaranteed

BULK RATE  
U.S. POSTAGE  
PAID  
HOUSTON, TEXAS  
PERMIT 3936